

AMENDMENTS TO THE CLAIMS

This listing will replace all prior versions, and listings, of claims, in the application:

Listing of Claims:

What is claimed is:

Claims 1.-37. (Canceled)

38. (New) An energy saving window system comprising:
a frame extending along the perimeter of a window;
two movable window panes disposed on opposite sides of the frame to define a volume enclosed between the window panes and the frame;
an outer window casement coupled to one of the two window panes;
an inner window casement coupled to another of the two window panes, the inner window casement comprising a plurality of mating parts, a first mating part being affixed to the frame and a second of the mating part being movable from the first mating part;
an actuation system disposed within the volume, the actuation system comprising one or more independent drive shafts connected to one or more drive motors;
a plurality of action levers disposed in the volume, a first group of action levers being situated in the upper part of the volume and a second group of action levers being situated in the lower part of the volume symmetrically from the first group of action levers, each action lever having a first end and a second end, each action lever in the first group being coupled at the first end to the first end of an action lever in the second group, each second end being coupled to the outer or inner casement so that the actuation system causes the action levers to rotate and the window panes to move one in relation to the other; and
a plurality of multiple hinges each coupling one of the outer or inner window casements to the frame, the plurality of hinges being extendable and supporting the window panes when the window panes move one in relation to the other.

39. (New) The energy saving window system of claim 38, wherein the frame has an I, U, L, C or T cross-sectional profile.

40. (New) The energy saving window system of claim 39, wherein at least one of the outer and inner window casements are enclosed within the I, U, L, C, or T profile.

41. (New) The energy saving window system of claim 38, wherein at least part of the frame is part of a building frame.

42. (New) The energy saving window system of claim 38, wherein each of the window panes is coupled to a pane profile.

43. (New) The energy saving window system of claim 38, wherein the inner and outer casements are disposed behind the peripheral portion of the window panes.

44. (New) The energy saving window system of claim 38, wherein the window panes are made of insulating glass.

45. (New) The energy saving window system of claim 44, wherein the insulating glass has a variable heat transmission coefficient U of about 1.1-1.6 W/m²⁰K and a variable light transmission coefficient of about 68% to 77%.

46. (New) The energy saving window system of claim 45, wherein the insulating glass comprises two parallel glass sheets spaced one from the other, further comprising a conduit disposed within a space between the two glass sheets, the conduit heating or cooling the space.

47. (New) The energy saving window system of claim 46, wherein the conduit heats or cools the space by the temperature differential between the space and a liquid flowing in the conduit.

48. (New) The energy saving window system of claim 38, wherein at least one of the window panes is a double glazing glass pane having a heat transmission coefficient of about 0.3-0.6 W/m²⁰K.

49. (New) The energy saving window system of claim 38, wherein the outer and inner window casements have a heat transmission coefficient of about 0.6-0.8 W/m²⁰K.

50. (New) The energy saving window system of claim 38, wherein the plurality of action levers is eight levers, and the first and second groups each comprise four action levers.

51. (New) The energy saving window system of claim 38, wherein the plurality of action levers is two action levers in the first group and two action levers in the second group.

52. (New) The energy saving window system of claim 38, wherein the plurality of mating parts are separable manually.

53. (New) The energy saving window system of claim 38, wherein the multiple hinges each include two folding members connected to the one another, the outer or inner window casements, or the frame by rotating pins.

54. (New) The energy saving window system of claim 38, wherein the one or more drive shafts are two drive shafts.

55. (New) The energy saving window system of claim 38, wherein the one or more drive motors are coupled to the frame.

56. (New) The energy saving window system of claim 38, wherein the rod or the rack and pinion system may be straight or curved.

57. (New) The energy saving window system of claim 38, wherein the rod or the rope is two rods or two ropes.

58. (New) The energy saving window system of claim 38, wherein the multiple hinges support the window panes by carrying the weight of the window panes.

59. (New) The energy saving window system of claim 38, wherein the multiple hinges are situated in the upper part of the volume.

60. (New) The energy saving window system of claim 38, wherein the window panes move one in relation to the other by moving while remaining one parallel to the other.

61. (New) The energy saving window system of claim 38, wherein the pluralities of action levers and multiple hinges are visible through the window panes at least partially.

62. (New) The energy saving window system of claim 38, wherein each action lever is coupled to the inner or outer casements by being coupled is coupled with a piston system.

63. (New) The energy saving window system of claim 38, wherein each action lever in the first group is coupled at the first end to the first end of an action lever in the second group by a rod, a rope, a rack and pinion system, or a gear and toothed rod system.

64. (New) The energy saving window system of claim 63, wherein each action lever is coupled to the rod, the rope, the rack and pinion system, or the gear and toothed rod by a rotating pin, and wherein each action lever is coupled to the inner or outer casements by being slidably coupled to a bracket with a rotating pin, the bracket sliding within a guide block.

65. (New) The energy saving window system of claim 38, further comprising a conduit disposed in the volume, the conduit heating or cooling the volume.

66. (New) The energy saving window system of claim 38, further comprising a first and a second auxiliary levers coupled to one of the action levers, the first auxiliary lever coupling the action lever to the outer or inner window casement, to one end of the action lever, and to the second auxiliary lever, the second auxiliary lever coupling the first auxiliary lever to the frame.

67. (New) The energy saving window system of claim 66, wherein the second auxiliary lever is coupled to the frame by being coupled to a holder coupled to the frame.

68. (New) The energy saving window system of claim 66, wherein each action lever in the first group is coupled at the first end to the first end of an action lever in the second group by a rod, a rope, a rack and pinion system, or gear and toothed rod system.

69. (New) The energy saving system of claim 38, wherein the plurality of action levers comprise action levers having different configurations.

70. (New) The energy saving window system of claim 38, further comprising a blind or curtain disposed between the window panes.

71. (New) The energy saving window system of claim 70, wherein the blind or curtain is made of a material having a variable thermal conductivity of about 0.00125-0.014 W/m°K.

72. (New) The energy saving window system of claim 70, wherein the blind or curtain is motor-driven.

73. (New) The energy saving window system of claim 38, wherein at least one of the window panes is made of insulating glass having two parallel glass sheets, wherein the blind or curtain disposed between the two parallel glass sheets.